

Amendments to the Specification:

Please replace the paragraph beginning on page 1, line 6 with the following rewritten paragraph:

--Reference is made to commonly assigned pending U.S. Patent Application Serial No. 10/823,453 [] filed April 13, 2004 herewith entitled ARTICLE FOR INHIBITING MICROBIAL GROWTH by Joseph F. Bringley, David L. Patton, Richard W. Wien, Yannick J. F. Lerat (~~docket 87834~~); pending U.S. Patent Application Serial No. 10/823,443 [] filed April 13, 2004 herewith entitled USE OF DERIVATIZED NANOPARTICLES TO MINIMIZE GROWTH OF MICRO-ORGANISMS IN HOT FILLED DRINKS by Richard W. Wien, David L. Patton, Joseph F. Bringley, Yannick J. F. Lerat (~~docket 87471~~); pending U.S. Patent Application Serial No. 10/822,945 [] filed April 13, 2004 herewith entitled ARTICLE FOR INHIBITING MICROBIAL GROWTH IN PHYSIOLOGICAL FLUIDS by Joseph F. Bringley, David L. Patton, Richard W. Wien, Yannick J. F. Lerat (~~docket 87833~~); pending U.S. Patent Application Serial No. 10/822,940 [] filed April 13, 2004 herewith entitled DERIVATIZED NANOPARTICLES COMPRISING METAL-ION SEQUESTRAINT by Joseph F. Bringley (~~docket 87428~~); and pending U.S. Patent Application Serial No. 10/822,929 [] filed April 13, 2004 herewith entitled COMPOSITION OF MATTER COMPRISING POLYMER AND DERIVATIZED NANOPARTICLES by Joseph F. Bringley, Richard W. Wien, ~~David L. Patton Richard L. Parton~~ (~~docket 87708~~); and pending U.S. Patent Application Serial No. 10/822,939 [] filed April 13, 2004 herewith entitled COMPOSITION COMPRISING INTERCALATED METAL-ION SEQUESTRANTS by Joseph F. Bringley, David L. Patton, Richard W. Wien (~~docket 87765~~), the disclosures of which are incorporated herein by reference.--

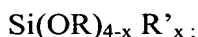
Please replace the paragraph beginning on page 8, line 27 with the following rewritten paragraph:

--The growth of microbes in an article such as a fluid container containing a liquid nutrient comprising a liquid nutrient can be inhibited by placing metal-ion sequestering agents, as described in pending U.S. Patent Application Serial No. 10/822,940 [] filed April 13, 2004 herewith entitled DERIVATIZED NANOPARTICLES COMPRISING METAL-ION SEQUESTRAINT by Joseph F. Bringley (~~docket 87428~~), and pending U.S. Patent Application Serial No. 10/822,929 [] filed April 13, 2004 herewith entitled COMPOSITION OF MATTER COMPRISING POLYMER AND DERIVATIZED NANOPARTICLES by Joseph F. Bringley et al. (~~docket 87708~~) capable of removing a designated metal ion for example, Mn, Fe, Ca, Zn, Cu and

Al from said liquid nutrients, in contact with the nutrient. Intimate contact is achieved by incorporating the metal-ion sequestering agent as an integral part of the support structure of the article. For example, one can control the concentration of "free" iron in the liquid nutrient held by the article by placing an iron sequestering agent in the walls of the container, which in turn controls the growth rates, and abundance of micro-organisms. The article, such as a container, may be used for holding a food or beverage.--

Please replace the paragraph beginning on page 10, line 25 with the following rewritten paragraph:

--In a particularly preferred embodiment, the invention provides a fluid container wherein said metal-ion sequestering agent comprises derivatized nanoparticles comprising inorganic nanoparticles having an attached metal-ion sequestrant, wherein said inorganic nanoparticles have an average particle size of less than 200 nm and the derivatized nanoparticles have a stability constant greater than 10^{10} with iron (III). It is preferred that the inorganic nanoparticles have an average particle size of less than 100 nm. It is preferred that said metal-ion sequestrant is attached to the nanoparticle by reacting the nanoparticle with a silicon alkoxide intermediate of the sequestrant having the general formula:



wherein x is an integer from 1 to 3;

R is an alkyl group; and

R' is an organic group containing an alpha amino carboxylate, a hydroxamate, or a catechol. Derivatized nanoparticles useful for practice of the invention are described in detail in pending U.S. Patent Application Serial No. 10/822,940 [_____] filed April 13, 2004 ~~herewith~~ entitled DERIVATIZED NANOPARTICLES COMPRISING METAL-ION SEQUESTRAINT by Joseph F. Bringley, ~~(docket 87428) co-filed herewith--~~

Please replace the paragraph beginning on page 11, line 13 with the following rewritten paragraph:

--In a preferred embodiment the metal-ion sequestering agent is immobilized in a polymeric layer, and the polymeric layer contacts the fluid

contained therein. The metal-ion sequestrant may be formed integrally within the materials comprising the bottle or may be contained within a polymeric layer directly in contact with the beverage or liquid nutrient. It is preferred that the polymer is permeable to water. It is preferred that the metal-ion sequestering agent comprises are 0.1 to 50.0 % by weight of the polymer. Polymers useful for practice of the invention are described in detail in pending U.S. Patent Application Serial No. 10/823,453 [_____] filed April 13, 2004 ~~herewith~~ entitled ARTICLE FOR INHIBITING MICROBIAL GROWTH by Joseph F. Bringley et al. (~~docket 87834~~).--

Please replace the paragraph beginning on page 11, line 23 with the following rewritten paragraph:

--In a preferred embodiment, the metal-ion sequestering agent comprises an alpha amino carboxylate, a hydroxamate, or a catechol functional group. Metal-ion sequestrants suitable for practice of the invention include ethylenediaminetetraacetic acid (EDTA), ethylenediaminetetraacetic acid disodium salt, diethylenetriaminepentaacetic acid (DTPA), Hydroxylpropylenediaminetetraacetic acid (DPTA), nitrilotriacetic acid, triethylenetetraaminehexaacetic acid, N,N'-bis(o-hydroxybenzyl) ethylenediamine-N,N' diacetic acid, and ethylenebis-N,N'-(2-o-hydroxyphenyl)glycine, acetohydroxamic acid, and desferroxamine B (the iron chelating drug desferal), catechol, disulfocatechol, dimethyl-2,3-dihydroxybenzamide, mesitylene catecholamide (MECAM) and derivatives thereof, 1,8-dihydroxynaphthalene-3,6-sulfonic acid, and 2,3-dihydroxynaphthalene-6-sulfonic acid, and siderophores molecules naturally synthesized by micro-organisms which have a very high affinity for Fe. Metal-ion sequestering agents suitable for use in the invention are described at length in pending U.S. Patent Application Serial No. 10/822,940 [_____] filed April 13, 2004 ~~herewith~~ entitled ARTICLE FOR INHIBITING MICROBIAL GROWTH by Joseph F. Bringley et al. (~~docket 87428~~).--

Please replace the paragraph beginning on page 18, line 3 with the following rewritten paragraph:

--Figure 22 is an enlarged partial view of a portion of the fluid bed 270 containing a metal-ion sequestering material 275. An example of the metal-ion sequestering material 275 comprises a core material 300 and a shell material 305 made of the metal-ion sequestering agent 35 as described in pending U.S.

Patent Application Serial No. 10/822,940 [] filed April 13, 2004
~~herewith~~ entitled ARTICLE FOR INHIBITING MICROBIAL GROWTH by
Joseph F. Bringley et al. (~~doctet 87428~~). As previously described above in Figure
21, the solution 280 containing "free" metal ions 310 flows through the fluid bed
270 as indicated by the arrows 315. As the solution 280 flows through the fluid
bed 270 the shell material 305 made of the metal-ion sequestering agent 35
gathers the metal ions 320 removing them from the solution, which then flow out
through the outlet port 265.--